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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,482

03/26/2004

Akiko Shimizu

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11/14/2006

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EXAMINER

KIM, RICHARD H

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,482

Applicant(s)

SHIMIZU, AKIKO

Examiner

Richard H. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/23/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4, 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US 6,417,904 B1) in view of Higashi et al. (US 6,060,183).

Referring to claims 1, 9 and 10, Yamaoka et al. discloses a device comprising a polarizing film (3); and a retarder, which comprises a substrate of a transparent resin film (11) and at least one coat layer with birefringent anisotropy (12) being on at least one surface of the substrate. However, the reference does not disclose that the in-plane retardation value (R_o) of the phase retarder is 20 to 300 nm, and the retardation value along the film thickness (R') calculated based on the retardation value (R_{40}) measured by inclining 40° around the slow axis in the plane and the in-plane retardation value (R_o) is 50 to 300 nm. As to the product by process limitation "calculated based on the retardation value (R_{40}) measured by inclining 40° around the slow axis in the plane and the in-plane retardation value (R_o)" it has been recognized that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product by itself. The patentability of the product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the

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prior art was made by a different process. "*In re Thorpe*, 227 USPQ 964,966 (Fed. Cir. 1985).

See also MPEP 2113.

Higashi et al. discloses a device wherein the in-plane retardation value (Ro) of the phase retarder is not less than 20 nm and the retardation in the thickness direction is more than 40 nm (col. 3, lines 9-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the in-plane retardation value (Ro) of the phase retarder to be not less than 20 nm and the retardation in the thickness direction to be more than 40 nm since one would be motivated to obtain a liquid crystal display device with superior viewing angle characteristics (col. 2, lines 63-64).

Referring to claims 5 and 6, Yamaoka et al. and Higashi et al. disclose the device previously recited. Yamaoka et al. fails to disclose the device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin.

Higashi et al. discloses a device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin (abstract; claim 15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin since one would be motivated to obtain a phase

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retarder having excellent durability, wide area and uniform optical characteristics (col. 2, lines 60-64).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. and Higashi et al., in view of Yamada et al. (US 5,739,889).

Yamaoka et al. and Higashi et al. disclose the device previously recited, but fails that the substrate of a transparent film has orientation in the film plane, and the in-plane retardation value (R_{ob}) of the substrate is not less than 20 nm.

Yamada et al. discloses a retardation of a transparent substrate to be not less than 20 nm (claim 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the retardation of a transparent substrate to be not less than 20 nm since one would be motivated to adjust the retardation of the liquid crystal display to improve viewing angle characteristics by utilizing other layers of retardance values.

Response to Arguments

4. Applicant's arguments filed 8/23/06 have been fully considered but they are not persuasive.

5. In response to Applicant's argument that Yamaoka does not disclose that the in-plane retardation value of the phase retardation is not less than 20 nm, and the retardation value along the film thickness direction calculated based on the retardation value measured by inclining by 40°, Examiner submits that Yamaoka was incorporated as the primary reference, in which

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Higashi was used to teach the claimed retardation values. Higashi teaches the claimed retardation values. Higashi teaches that the in plane retardation value is not more than 50 nm, and than the retardation in the thickness direction. Therefore, this is a case of overlapping ranges and thus establishes a prima facie case of obviousness (see MPEP 2144.05(b)).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard H Kim
Examiner
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RHK


ANDREW SCHECHTER
PRIMARY EXAMINER